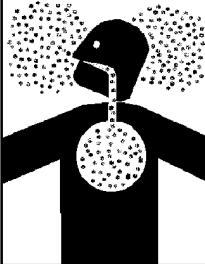


PERIODIC MAINTENANCE

VENTING SYSTEM INSPECTION

⚠ WARNING

Breathing Hazard - Carbon Monoxide Gas



- Flue gases may escape if vent pipe is not connected.
- Be alert for obstructed, sooted or deteriorated vent system to avoid serious injury or death.
- Do not store corrosive chemicals in vicinity of water heater.
- Chemical corrosion of flue and vent system can cause serious injury or death.

Breathing carbon monoxide can cause brain damage or death.
Always read and understand instruction manual.

At least once a year a visual inspection should be made of the venting system. You should look for:

1. Obstructions which could cause improper venting. The combustion and ventilation air flow must not be obstructed.
2. Damage or deterioration which could cause improper venting or leakage of combustion products.

Be sure the vent piping is properly connected to prevent escape of dangerous flue gasses which could cause deadly asphyxiation.

Obstructions and deteriorated vent systems may present serious health risk or asphyxiation.

Chemical vapor corrosion of the flue and vent system may occur if air for combustion contains certain chemical vapors. Spray can propellants, cleaning solvents, refrigerator and air conditioner refrigerants, swimming pool chemicals, calcium and sodium chloride, waxes, bleach and process chemicals are typical compounds which are potentially corrosive.

If after inspection of the vent system you found sooting or deterioration, something is wrong. Call the local gas utility to correct the problem and clean or replace the flue and venting before resuming operation of the water heater.

BURNER OPERATION AND INSPECTION

Flood damage to a water heater may not be readily visible or immediately detectable. However, over a period of time a flooded water heater will create dangerous conditions which can cause DEATH, SERIOUS BODILY INJURY, OR PROPERTY DAMAGE. Contact a qualified installer or service agency to replace a flooded water heater. Do not attempt to repair the unit! It must be replaced!

At least once a year a visual inspection should be made of the main burner and the hot surface igniter assembly for proper flame characteristics and ignition sequences. This can be done by removing the Outer Door and viewing the main burner operation through the Viewport on the Inner Door, see Figure 1. The main burner should provide complete combustion of gas, ignite rapidly, give reasonably quiet operation, and cause no excessive flame lifting from the burner ports. If the proper flame characteristics are not evident (see Figure 20), make sure that the flow of combustion and ventilation air is not blocked on the Air Intake Screen at the base of the water heater (see Figure 21), the Lint screen on the blower assembly (see Figure 1), and in the venting system.

You should also check for sooting. Soot is not normal and will impair

proper combustion. A visual inspection of the main burner and HSI igniter assembly should also be done at least once a year, see Figure 20.

Soot build-up indicates a problem that requires correction before further use. Turn "OFF" gas to water heater and leave off until repairs are made, because failure to correct the cause of the sooting can result in a fire causing death, serious injury, or property damage.

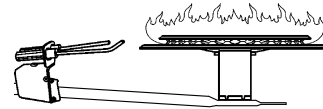


FIGURE 20.

BURNER CLEANING


In the event your burner or burner air openings require cleaning, turn the blower switch to the "OFF" position and allow the burner to cool. Call a service agency to remove and clean the burner and correct the problem that required the burner to be cleaned.

HOUSEKEEPING

Vacuum around base of water heater for dust, dirt, and lint on a regular basis.

⚠ DANGER

Fire and Explosion Hazard



- Do not obstruct combustion air openings at the bottom of the water heater.
- Do not use or store flammable vapor products such as gasoline, solvents or adhesives in the same room or area near water heater or other appliance.
- Visibly inspect air intake screen at least once every six months and clean if accumulated lint.
- Can cause serious injury or death.

This water heater unit is supplied with a plastic Air Intake Screen that will filter and prevent lint build-up on the bottom of the flame arrestor of this heater. To prevent the lint build-up on the arrestor, the lint screen must be installed on the Base Pan with the "arrows" pointing upwards as shown in Figure 21. If the Air Intake Screen is missing from this heater, please contact your service agency or local installer for a replacement part.

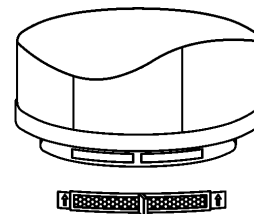


FIGURE 21.

AT LEAST ONCE EVERY SIX MONTHS A VISUAL INSPECTION SHOULD BE MADE OF THE AIR INTAKE SCREENS ON THE BASE OF THE WATER HEATER AND THE BLOWER ASSEMBLY. CLEAN IF LINT ACCUMULATIONS ARE NOTICED.

INSTALLED IN SUITABLE AREA: To insure sufficient ventilation and combustion air supply, proper clearances from the water heater must be maintained. See “Locating the New Water Heater” section. Combustible materials such as clothing, cleaning materials, or flammable liquids, etc. must not be placed against or adjacent to the water heater which can cause a fire.

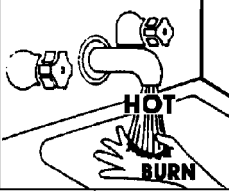
ANODE ROD INSPECTION

CAUTION
Property Damage Hazard
<ul style="list-style-type: none"> • Avoid water heater damage. • Inspection and replacement of anode rod required.

The anode rod is used to protect the tank from corrosion. Most hot water tanks are equipped with an anode rod. The submerged rod sacrifices itself to protect the tank. Instead of corroding the tank, water ions attack and eat away the anode rod. This does not affect the water’s taste or color. The rod must be maintained to keep the tank in operating condition.

Anode deterioration depends on water conductivity, not necessarily water condition. A corroded or pitted anode rod indicates high water conductivity and should be checked and/or replaced more often than an anode rod that appears to be intact. Replacement of a depleted anode rod can extend the life of your water heater. Inspection should be conducted by a qualified technician, and at a minimum should be checked annually after the warranty period.

TEMPERATURE-PRESSURE RELIEF VALVE OPERATION

▲ DANGER	<ul style="list-style-type: none"> • Burn hazard. • Hot water discharge. • Keep clear of relief valve discharge outlet.
	

The temperature-pressure relief valve must be manually operated at least once a year.

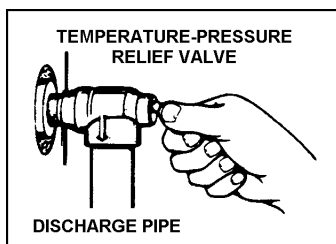


FIGURE 22.

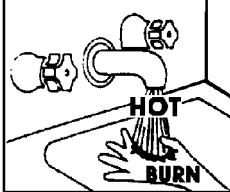
When checking the temperature-pressure relief valve operation, make sure that (1) no one is in front of or around the outlet of the temperature-pressure relief valve discharge line, and (2) that the water discharge will not cause any property damage, as the water may be extremely hot, see Figure 22.

If after manually operating the valve, it fails to completely reset and

continues to release water, immediately close the cold water inlet to the water heater, follow the draining instructions, and replace the temperature-pressure relief valve with a new one.

If the temperature-pressure relief valve on the appliance weeps or discharges periodically, this may be due to thermal expansion. You may have a check valve installed in the water line or a water meter with a check valve. Consult your local water supplier or service agency for further information. Do not plug the temperature-pressure relief valve.

DRAINING

▲ DANGER	<ul style="list-style-type: none"> • Burn hazard. • Hot water discharge. • Keep hands clear of drain valve discharge.
	

The water heater should be drained if being shut down during freezing temperatures. Also periodic draining and cleaning of sediment from the tank may be necessary.

1. Set the blower switch to the “OFF” position and turn electrical power off to blower.
2. Turn off the gas to the water heater at the manual gas shut-off valve.
3. OPEN a nearby hot water faucet until the water is no longer hot.
4. CLOSE the cold water inlet valve.
5. Connect a hose to the drain valve and terminate it to an adequate drain or external to the building.
6. OPEN the water heater drain valve to allow all of the water to drain from the tank. Flush the tank with water as needed to remove sediment.

NOTE: If the water heater is going to be shut down and drained for an extended period, the drain valve should be left open with hose connected allowing water to terminate to an adequate drain.

7. Close the drain valve, refill the tank, and restart the heater as directed in this manual.
8. Follow instructions in the “Filling The Water Heater” section.
9. Follow the lighting instructions on the label or see page 21 under “Lighting Instructions” to restart the water heater.

DRAIN VALVE WASHER REPLACEMENT

(See Figure 23)

1. Turn “OFF” gas supply to water heater.
2. Follow “Draining” instructions.
3. Turning counterclockwise (↺), remove the hex cap below the screw handle.
4. Remove the washer and put the new one in place.
5. Screw the handle and cap assembly back into the drain valve and retighten using a wrench. DO NOT OVER TIGHTEN.
6. Follow instructions in the “Filling The Water Heater” section.
7. Check for leaks.

- Follow the lighting instructions in the "Lighting" section to restart the water heater.

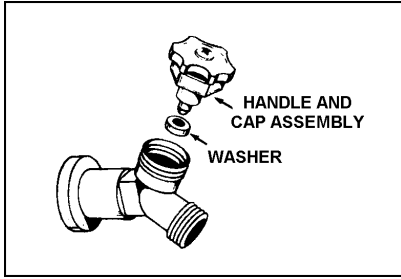


FIGURE 23.

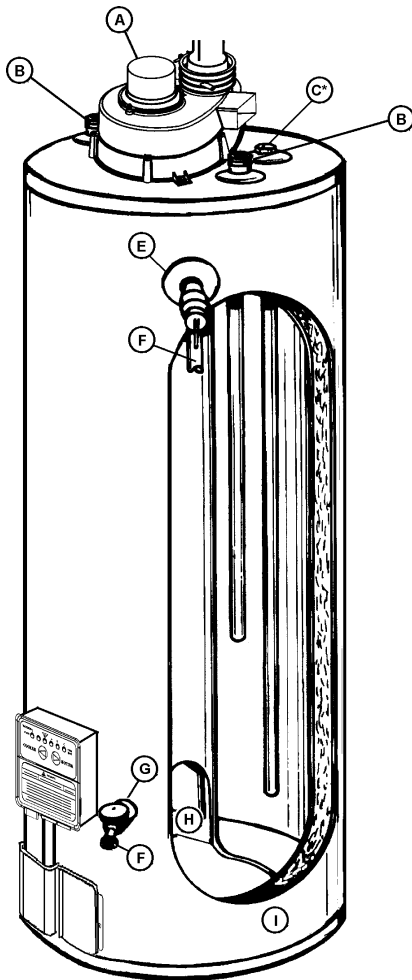
SERVICE

If a condition persists or you are uncertain about the operation of the water heater contact a service agency.

Use this guide to check a "Leaking" water heater. Many suspected "Leakers" are not leaking tanks. Often the source of the water can be found and corrected.

If you are not thoroughly familiar with gas codes, your water heater, and safety practices, contact your gas supplier or qualified installer to check the water heater.

LEAKAGE CHECKPOINTS



Read this manual first. Then before checking the water heater make sure the gas supply has been turned "OFF", and never turn the gas "ON" before the tank is completely full of water.

Never use this water heater unless it is completely filled with water. To prevent damage to the tank, the tank must be filled with water. Water must flow from the hot water faucet before turning "ON" gas to the water heater.

- Water at the blower assembly is water vapor which has condensed out of the combustion products. This is caused by a problem in the vent. Contact the gas utility.
- *Condensation may be seen on pipes in humid weather or pipe connections may be leaking.
- *The anode rod fitting may be leaking (anode is located under the Blower Assembly).
- Small amounts of water from temperature-pressure relief valve may be due to thermal expansion or high water pressure in your area.
- *The temperature-pressure relief valve may be leaking at the tank fitting.
- Water from a drain valve may be due to the valve being slightly opened.
- *The drain valve may be leaking at the tank fitting.
- Combustion products contain water vapor which can condense on the cooler surfaces of the tank. Droplets form and drip onto the burner or run on the floor. This is common at the time of start-up after installation and when incoming water is cold.
- Water in the water heater bottom or on the floor may be from condensation, loose connections, or the relief valve. **DO NOT** replace the water heater until a full inspection of all possible water sources is made and necessary corrective steps taken.

Leakage from other appliances, water lines, or ground seepage should also be checked.

- * To check where threaded portion enters tank, insert cotton swab between jacket opening and fitting. If cotton is wet, follow "Draining" instructions in the "Periodic Maintenance" section and then remove fitting. Put pipe dope or teflon tape on the threads and replace. Then follow "Filling the Water Heater" instructions in the "Installing the New Water Heater" section.

⚠ WARNING

Read and understand instruction manual and safety messages before installing, operating or servicing this water heater.

Failure to follow instructions and safety messages could result in death or serious injury.

Instruction Manual must remain with water heater.



REPAIR PARTS LIST

Key No.	Part Description
1	Burner Assembly
2	Burner Head
3	Burner Orifice
4	Burner Tube
5	HSI Ignition Assembly
6	Inner Door
7	Inner Door Gasket
8	Flue Baffle
9	Flue Restrictor
10	Blower Assembly
11	Air Intake Screen - Base Pan
12	Inlet Tube
13	Gas Control Valve Thermostat
14	Drain Valve
15	Drain Valve Washer
16	Outer Door (may appear different than shown)
17	Anode Rod
18	Temperature-Pressure Relief Valve
19	Viewport Bracket
20	Viewport Glass
21	Viewport Insulation
22	20" Dia. Metal Drain Pan w/Side Drain (optional)
	22" Dia. Metal Drain Pan w/Side Drain (optional)
	24" Dia. Metal Drain Pan w/Side Drain (optional)
	26" Dia. Metal Drain Pan w/Side Drain (optional)
*23	Instruction Manual
24	Air Intake Screen - Blower Assembly
25	FV Sensor
26A	FV Sensor Bracket (40K & 50K models only)
26B	FV Sensor Bracket (55K & 62.5K models only)
**27	Nipple with Heat Trap
**28	Secondary Anode with Heat Trap

* Not Shown.

** Optional

Now that you have purchased this water heater, should a need ever exist for repair parts or service, simply contact the company it was purchased from or direct from the manufacturer listed on the rating plate on the water heater.

Be sure to provide all pertinent facts when you call or visit.

Selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

The model number of your Gas Water Heater will be found on the rating place located above the gas control valve.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- MODEL NUMBER
- TYPE GAS (NATURAL OR PROPANE (L.P.))
- SERIAL NUMBER
- PART DESCRIPTION

THIS IS A REPAIR PARTS LIST, NOT A PACKING LIST.

